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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/748,763
Filing Date: December 30, 2003
Appellant(s): O'SHEA ET AL.

James M. Bagarazzi
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 11/13/2008 appealing from the Office action mailed 05/16/2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,918,211	Sloane	6-1999
GB 2 193000	Humble	1-1988

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

a. Claims 1-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloane (5,918,211).

Claims 1, 11, and 13: Sloane discloses a system, method, and apparatus for providing cross-marketing offers to a customer, comprising:

a. a product inventory location (i.e. a store) displaying products with electronic-readable tags (e.g. bar codes) (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);

b. a smart cart defining a product storage area used by a customer to store products while shopping (Figure 12, item 102);

c. A tag reading device (e.g. a scanner) for reading the tag to retrieve information from the electronic-readable tag (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);

d. determining a cross-marketing promotional offer associated with the product associated with the read tag (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);

e. notifying the customer in or near real-time of the offer (column 3, lines 12-31 and column 7, line 41 - column 8, line 63); and

f. measuring a cross-referencing a physical parameters of the product to verify the actual product corresponds to the product information (Figure 12, item 44a; column 4, lines 11-13; and column 9, lines 27-42).

While Sloane does not explicitly disclose that the product tag is an electronic tag, such as a tag that uses radio-frequencies or infra-red light to transmit data, these were well known within the industry prior to the instant invention and would have been obvious choices as substitutes for Sloane's bar code tags to one having ordinary skill in the art at the time the invention was made. One would have been motivated to use such electronic tags in order to preclude the customer from having to pick up the item or to move the reader next to the shelf (i.e. to "keep both hands free") as discussed in Sloane (column 7, lines 45-48).

Sloane discloses that the video camera images are used for "surveillance of the scanned products and the products being placed into the cart", i.e. the product information retrieved for the scanned product is compared (cross-referenced) to the product information of the imaged products being placed into the cart. A small video camera is disposed within the portable bar code scanner and directed at the scanning face such that a video image of each product scanned is generated. The video signal is transmitted, via the wireless transmission medium, to a central monitoring station where the consumer can be watched and/or recorded. Generally, when a consumer uses the portable bar code scanner, it will be releasably mounted to their shopping cart so that the consumer's hands are free. The video camera will have a viewing range that

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includes the shopping cart. This will enable the surveillance of the scanned products and the products being placed into the cart (col. 4, lines 1-13).

A small video camera 44a (FIG. 2c) is disposed in scanner 20 so that when the scanner is mounted on cart 102, it faces into the shopping cart, and has a viewing range 130 that can be in a range of 10-180.degree. or more if necessary. Scanner 20 will transmit the video signal to a video receiver 106, which is connected to a video monitor 108 and video recorder 110 in a central monitoring station (not shown). The use of the scanner 20, as well as the area of the store within the camera's view, can now be visually monitored while the consumer is shopping (col. 9, lines 29-38).

Claim 2: Sloane discloses a system as in Claim 1 above, and further discloses the offer is triggered by at least two items in the customer-storage-area (shopping cart)(column 8, lines 21-29).

Claims 3, 4, and 12: Sloane discloses a system, method, and apparatus as in Claims 1 and 11 above, and further discloses incorporating various wireless connections, such as radio frequencies (RF), infrared, cellular, shortwave, and any other known method of transmitting and receiving information without use of direct wire connections" (column 7, lines 52-56). While Sloane does not explicitly disclose that the product tag would also incorporate the RF wireless technology, as discussed above, it would have been

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obvious to do so to one having ordinary skill in the art at the time the invention was made.

Claim 5: Sloane discloses a system as in Claim 1 above, and further discloses using the store's central computer for performing the offer determining steps (column 7, line 41 - column 8, line 63).

Claim 7: Sloane discloses a system as in Claim 1 above, but does not explicitly disclose that there is a computer on the shopping cart that performs the above steps. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a processor (computer) on the shopping cart and to use that processor to perform at least some of the computations disclosed in Sloane. One would have been motivated to use such an on-board processor (computer) in view of Sloane's disclosure of retrieving and displaying to the customer past offer selections, shopping histories, awarded credits etc. The use of such an on-board processor would free up the store's central computer for other processing, such as check-out processing, possibly resulting in faster, shorter check-out lines (which is one of Sloane's motivations for having the scanners).

Claims 6, 8, and 9: Sloane discloses a system, method, and apparatus as in Claims 1 and 7 above, and further discloses a customer-interface on the shopping cart that

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displays the scanned or requested product information and/or offer to the customer (column 7, line 41 - column 8, line 63).

b. Claims 10, 14-19, and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloane (5,918,211) in view of Humble (GB 2,193,000).

Claims 10, 14, and 17: Sloane discloses a system, method, and apparatus as in Claims 9, 11, and 16 above, but does not explicitly disclose using a scale to measure a physical parameter (e.g. weight) of the product being scanned nor determining if the weight is within a tolerance for the product. However, Humble discloses a similar system, method, and apparatus for shopping in which one or more scales are used to measure the weight of the product in order to compare it with a predetermined weight of the product in order to ensure that the product matches the scanned bar code. Humble discloses that the scale may measure the weight of each individual product or the weight of the shopping cart (i.e. total weight of all products) and determine the difference between the cart prior to the removal of the product at the check-out and after removal, thus determining the weight of the removed product. (column 1, line 27-127).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to incorporate a measuring device, such as a scale, into the cart in order to verify that the scanned product is actually the one placed into the cart (or removed from the cart and placed into the bag at check-out). One would have been motivated to use a scale in the cart in this manner in view of Humble's disclosure that systems using product weight to identify the product had been around for

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years prior to the invention. The Examiner notes that incorporating such a scale on the cart would also allow the customer to weigh loose produce, such as fresh fruits and vegetables, without searching for a hanging scale as is commonly located within a grocery supermarket.

Claims 18 and 23-26: Sloane discloses a system, method, and apparatus for providing cross-marketing offers to a customer, comprising:

- a. a product inventory location (i.e. a store) displaying products with electronic-readable tags (e.g. bar codes) (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);

- b. A tag reading device (e.g. a scanner) for reading the tag to retrieve information from the electronic-readable tag (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);

- c. determining a cross-marketing promotional offer associated with the product associated with the read tag (column 3, lines 12-31 and column 7, line 41 - column 8, line 63); and

- d. notifying the customer in or near real-time of the offer (column 3, lines 12-31 and column 7, line 41 - column 8, line 63).

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e. establishing a communication to a third party computer so that the customer can directly communicate with a third party via the customer interface (column 2, lines 1-21 and 35-43). Sloane allows the consumer to retrieve and store various coupons, sales information, etc. through the Internet and to retrieve these information/coupons while shopping with the smart cart, implicitly establishing the appropriate connections. Furthermore, since Sloane explicitly discloses that the consumer interface is in radio frequency communication with the store computer and/or the point-of-sale terminals, it is inherent that connections to other (third-party) computers could be made through the same radio frequency communications, as long as the third party computers have a radio frequency receiving means. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to establish communications with one or more third party computers in order to retrieve the customer's frequent shopper account information, saved coupon information downloaded from the Internet, or any other third party computer so desired. One would have been motivated to make such a connection in order to allow the customer in Sloane to utilize the pre-selected Internet coupons (or to do the selection while shopping).

While Sloane does not explicitly disclose that the product tag is an electronic tag, such as a tag that uses radio-frequencies or infra-red light to transmit data, these were well known within the industry prior to the instant invention and would have been obvious choices as substitutes for Sloane's bar code tags to one having ordinary skill in the art at the time the invention was made. One would have been motivated to use

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such electronic tags in order to preclude the customer from having to pick up the item or to move the reader next to the shelf (i.e. to "keep both hands free") as discussed in Sloane (column 7, lines 45-48).

Sloane does not explicitly disclose using a scale in the cart to measure a physical parameter (e.g. weight) of the product being scanned nor determining if the weight is within a tolerance for the product. However, Humble discloses a similar system, method, and apparatus for shopping in which one or more scales are used to measure the weight of the product in order to compare it with a predetermined weight of the product in order to ensure that the product matches the scanned bar code. Humble discloses that the scale may measure the weight of each individual product or the weight of the shopping cart (i.e. total weight of all products) and determine the difference between the cart prior to the removal of the product at the check-out and after removal, thus determining the weight of the removed product. (column 1, line 27-127). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to incorporate a measuring device, such as a scale, into the cart in order to verify that the scanned product is actually the one placed into the cart (or removed from the cart and placed into the bag at check-out). One would have been motivated to use a scale in the cart in this manner in view of Humble's disclosure that systems using product weight to identify the product had been around for years prior to the invention. The Examiner notes that incorporating such a scale on the cart would also allow the customer to weigh loose produce, such as fresh fruits and

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vegetables, without searching for a hanging scale as is commonly located within a grocery supermarket.

Claim 19: Sloane and Humble disclose an apparatus as in Claim 18 above, and Sloane further discloses a customer-interface on the shopping cart that displays the scanned or requested product information and/or offer to the customer (column 7, line 41 - column 8, line 63).

Claims 15 and 21: Sloane and Humble disclose an apparatus as in Claim 14 and 19 above, and Sloane further discloses transferring the product information from the cart to the check-out computer (column 3, lines 48-59).

Claims 16 and 27: Sloane and Humble disclose a method and apparatus as in Claims 15 and 26 above, and Sloane further discloses determining the total and net sales price for the products checked through the check-out to include adding sales taxes and subtracting discounts (column 3, lines 48-59).

Claim 22: Sloane and Humble disclose an apparatus as in Claim 19 above, but neither explicitly disclose that the tag reader and the scale are integrated into the same component. However, such integration would have been obvious to one having ordinary skill in the art at the time the invention was made in order to more easily pass

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the data between the two devices as disclosed by Humble. Furthermore, such an integration would eliminate the need to have connecting wires running through the shopping cart that may be damaged by the customer and the normal usage of the cart.

(10) Response to Argument

Appellant argues in reference to Independent claims 1 and 11:

a) Sloane fails to teach or render obvious a smart cart that includes an item evaluator that measures a physical parameter of products placed in the cart, whereby the physical parameter is cross-referenced with product information to verify that the scanned product actually corresponds to the product referenced in the product information. The Examiner notes that, first of all, Sloane explicitly discloses a video camera as a security device that takes a video image (i.e. a physical parameter) of the product being placed into the cart and compares it with stored image information about the scanned product to prevent fraud. Secondly, Sloane discloses that the video camera images are used for "surveillance of the scanned products and the products being placed into the cart", i.e. the product information retrieved for the scanned product is compared (cross-referenced) to the product information of the imaged products being placed into the cart. Further, a small video camera is disposed within the portable bar code scanner and directed at the scanning face such that a video image of each product scanned is generated. The video signal is transmitted, via the wireless transmission medium, to a central monitoring station where the consumer can be

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watched and/or recorded. Generally, when a consumer uses the portable bar code scanner, it will be releasably mounted to their shopping cart so that the consumer's hands are free. The video camera will have a viewing range that includes the shopping cart. This will enable the surveillance of the scanned products and the products being placed into the cart (col. 4, lines 1-13). Finally, a small video camera 44a (FIG. 2c) is disposed in scanner 20 so that when the scanner is mounted on cart 102, it faces into the shopping cart, and has a viewing range 130 that can be in a range of 10-180.degree. or more if necessary. Scanner 20 will transmit the video signal to a video receiver 106, which is connected to a video monitor 108 and video recorder 110 in a central monitoring station (not shown). The use of the scanner 20, as well as the area of the store within the camera's view, can now be visually monitored while the consumer is shopping (col. 9, lines 29-38).

Appellant argues in reference to Independent claim 18:

a) The Humble reference does not teach or disclose an item evaluator such as scale or other device that is configured in the shopping cart. The Examiner notes that first of all, Humble discloses a similar system, method, and apparatus for shopping in which one or more scales are used to measure the weight of the product in order to compare it with a predetermined weight of the product in order to ensure that the product matches the scanned bar code. Secondly, Humble discloses that the scale may measure the weight of each individual product or the weight of the shopping cart (i.e. total weight of all products) and determine the difference between the cart prior to the

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removal of the product at the check-out and after removal, thus determining the weight of the removed product. (column 1, line 27-127). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to incorporate a measuring device, such as a scale, into the cart in order to verify that the scanned product is actually the one placed into the cart (or removed from the cart and placed into the bag at check-out). One would have been motivated to use a scale in the cart in this manner in view of Humble's disclosure that systems using product weight to identify the product had been around for years prior to the invention. The Examiner notes that incorporating such a scale on the cart would also allow the customer to weigh loose produce, such as fresh fruits and vegetables, without searching for a hanging scale as is commonly located within a grocery supermarket.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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February 10, 2009

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